



## Growing Native Plants in the Classroom

Growing native plants in the classroom is a great way to provide hands-on learning for students of all ages. Nurturing plants as they progress from tiny seeds to full grown plants is an exciting process and is relatively easy.

Here is a guide to grow your own natives in your classroom.

Materials:

- Soil- It is important to have quality soil. Standard potting soil found at Lowe's or Home Depot will work fine, but if you plan on growing lots of plants, ProMix soil found at landscape suppliers can be bought in bulk.
- Germination container- It is standard to use open flats, which can be found at a landscape suppliers, but you can also use things like egg cartons or tupperware containers with holes poked in the bottom.
- Pots or plug flats- You can buy pots or plug flats at landscape suppliers. You could also turn this into a recycling project and collect a year's worth of yogurt containers, plastic cups, bottles, etc..
- Ziplock bags- seed collecting and storage



### Seed Collection

In order to grow plants you must have seeds! This requires some planning ahead as seeds that are to be grown in the spring need to have been collected in late summer or fall. It is usually apparent when a plant has mature seed that is ready to be collected. Here are some general guidelines to determine if the seed is ready:

- The plant should be finished flowering.
- There should not be any green tissue near the seed head. When the seed head begins to brown and dry out, it is a good sign that the seed is mature.

- If you are unsure, wait another week or two to collect. Most plants hang on to some of their seed long after it has matured.



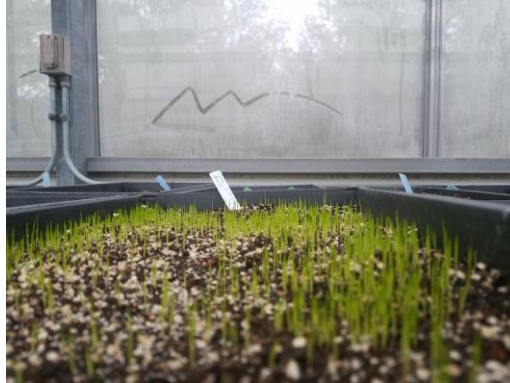
### Seed Storage

After you collect seed, it is important to store it properly until the following spring. An easy way to store seed is to combine the seed with some moist soil in a ziplock bag and keep it in the refrigerator. Most plant species require a 90 day cold environment. After this time is up, the seeds will be ready to germinate. You can keep the seeds in the refrigerator longer than 90 days, but it is important to check weekly that they are not germinating in the ziplock bags. If you find that the seeds have begun to germinate, it is important to lay them out within a day or two.

### Germination

When the seeds are finished with their cold treatment, it is time to lay them out for germination. Put 1-1.5 inches of moist soil in the bottom of your growing container and lay a thin layer of the seed and soil mixture on top of the 1 inch of soil. Many species need light to germinate, so it is important not to fully bury the seed. Place the germination flat next to a window that receives as much sunlight as possible.

The seeds can take anywhere from a few days to a month to germinate. During this time, it is important to make sure that the soil stays moist. If the soil dries out too much, there is a risk that the seed will not germinate. Poke a few holes in the lid of a plastic container to water the seeds and do so every day or two. Try not to flood the seeds by pouring large volumes of water over them, as they could become buried.



### Transplanting

Once the seeds have germinated, it will take a few weeks for them to grow large enough to be transplanted. To determine if the plants are ready to be transplanted, pull out a seedling or two and examine the roots. If the roots no longer appear to be translucent and have begun to branch, the seedlings are ready for transplanting. Another rule of thumb is to wait until the seedling is a 3-4 inches tall.

Fill your growing container with soil and gently press it down to remove large air pockets. Poke a hole in the soil with your finger or a marker. Gently pull a seedling out of the germination tray, being careful not to break off any roots, place the roots into the hole, and pinch the soil around the roots. Just like the germination flat, water the seedlings every day or two.

### Planting:

Once a plant's roots have reached the bottom of the planting container they are ready to plant outside. To prepare the plant for the outdoor planting keep them outside in the pots for a couple of weeks. This is called the hardening off phase. A part shady area allows for the plants to adjust for more intense sunlight. The wind outdoors helps the plants strengthen their stems. Setting the plants by an open window helps as well.

